Cellular (4G/5G) Smart Antennas

Location-aware Smart Antennas for signal repeaters and cellular gateway devices.

Welcome to a true revolution in antenna technology location-aware antennas that automatically adapt to their surroundings.

Powered by our innovative ZetiLink[™] technology, Zetifi Smart Antennas use onboard sensors, a dual gain antenna whip, and integrated data processor to optimise coverage. The Smart Antenna detects whether you're in flat or hilly terrain using a pre-loaded terrain map and automatically switches between high and low gain modes in real-time to maximise signal for your repeater or cellular gateway.

Experience better coverage than ever with the convenience and enhanced performance of a Zetifi Smart Antenna.











- Smart band selection and device optimisation for Nextivity CEL-FI ROAM R41 Repeaters.
- Boost control of CEL-FI ROAM R41 Repeater to turn off device in strong signal areas.
- Satellite ready with full compatibility across all direct-to-handset frequencies.
- Integrated GPS and processor to detect vehicle location and optimise coverage in real-time.

Download Zetifi Smart Antenna app to register, monitor and manage your device.







Physical Dimensions and Kit Components



Wiring Diagram



Not to scale

1050mm Technical Specifications (ANCA1101AU / ANCA1102AU)

SMART FEATURES Automatic switching between high and low gain modes Active band selection to maximise CEL-FI uptime.

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Boost control to turn off device when not needed.

Nominal VSWR

VSWR tests completed with included 4360mm LMR195 coaxial extension cable.





Frequency (MHz)

Frequency (MHz)

Antenna Performance

| Frequencies | 698-900 MHz, 1710-2700 MHz, 3400-3800 MHz | | | |
|---------------------------|---|----------------------------|--|--|
| Antenna Gain | 3dBi in low gain mode | 6.5dBi in high gain mode | | |
| Vertical Beamwidth | 50/30/20 in low gain mode | 25/15/10 in high gain mode | | |
| VSWR | <2.5:1 @ 698-900 MHz, <2:1 @ 1710-2700 MHz, <2:1 @ 3400-3800 MHz | | | |
| Nominal Impedance | 50 Ω | | | |
| Processor Electrical | | | | |
| Input Voltage | Min 12V DC to Max 18V DC | | | |
| Input Current | 60 mA | | | |
| Input Power | 0.7 W | | | |
| Mechanical | | | | |
| Construction | Fibreglass whip with reconfigurable low/high gain PCB antenna element Steel ferrule with integrated PCB ZetiLink™ controller board Bellied spring | | | |
| Mounting | M14 threaded stud & nut | | | |
| Mounting Hole | 16mm mounting hole | | | |
| Dimensions | Height: 1050mm total / 960mm antenna whip Width: 33mm (antenna whip) / 56mm (spring) / 42mm (base) | | | |
| Weight | 1250g antenna weight / 2310g package weight with cabling | | | |
| Integrated antenna cables | 145mm RG316 low loss coaxial cable terminated with SMA male connector 215mm 20AWG automotive power cable terminated to bullet connectors | | | |
| Battery cable | 2500mm 16AWG automotive power cable with 3A blade fuse terminated to bullet connectors (antenna end) and 8.5mm lugs (battery terminal end) | | | |
| Coaxial cable | 4360mm LMR195 coaxial cable terminated to SMA female (antenna end) and SMA male (device end) | | | |

High gain mode (6.5dBi)

780mm Technical Specifications (ANCA1103AU / ANCA1104AU)

SMART FEATURES Automatic switching between high and low gain modes Active band selection to maximise CEL-FI uptime.

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Boost control to turn off device when not needed.

Nominal VSWR

VSWR tests completed with included 4360mm LMR195 coaxial extension cable.





Frequency (MHz)

Frequency (MHz)

Antenna Performance

| Frequencies | 698-960 MHz, 1710-2700 MHz, 3400-3800 MHz | | | |
|---------------------------|---|----------------------------|--|--|
| Antenna Gain | 3dBi in low gain mode | 6dBi in high gain mode | | |
| Vertical Beamwidth | 40/40/30 in low gain mode | 30/30/20 in high gain mode | | |
| VSWR | <2.5:1 @ 698-960 MHz, <2.5:1 @ 1710-2700 MHz, <2.5:1 @ 3400-3800 MHz | | | |
| Nominal Impedance | 50 Ω | | | |
| Processor Electrical | | | | |
| Input Voltage | Min 12V DC to Max 18V DC | | | |
| Input Current | 60 mA | | | |
| Input Power | 0.7 W | | | |
| Mechanical | | | | |
| Construction | Fibreglass whip with reconfigurable low/high gain PCB antenna element Steel ferrule with integrated PCB ZetiLink™ controller board Bellied spring | | | |
| Mounting | M14 threaded stud & nut | | | |
| Mounting Hole | 16mm mounting hole | | | |
| Dimensions | Height: 780mm total / 690mm antenna whip Width: 33mm (antenna whip) / 56mm (spring) / 42mm (base) | | | |
| Weight | 1116g antenna weight / 2176g package weight with cabling | | | |
| Integrated antenna cables | 145mm RG316 low loss coaxial cable terminated with SMA male connector 215mm 20AWG automotive power cable terminated to bullet connectors | | | |
| Battery cable | 2500mm 16AWG automotive power cable with 3A blade fuse terminated to bullet connectors (antenna end) and 8.5mm lugs (battery terminal end) | | | |
| Coaxial cable | 4360mm LMR195 coaxial cable terminated to SMA female (antenna end) and SMA male (device end) | | | |

Ordering Guide

All Zetifi Smart Antennas are available as antenna only or as a bundled solution with the CEL-FI ROAM R41 Signal Repeater from Nextivity.

| Included Smart Antenna | Order Code | Description |
|---------------------------------|---------------|--|
| ANCA1101AU 1050mm Black | ANCA1101AU-02 | Cellular (4G/5G) Smart Antenna - 1050mm Black |
| | ANCA1101AU-04 | CEL-FI ROAM R41 Vehicle Booster Pack - 1050mm Black |
| ANCA1102AU 1050mm Black | ANCA1102AU-02 | Cellular (4G/5G) Smart Antenna - 1050mm Black |
| | ANCA1102AU-04 | CEL-FI ROAM R41 Vehicle Booster Pack - 1050mm Black |
| ANCA1103AU 780mm Matte Black | ANCA1103AU-02 | Cellular (4G/5G) Smart Antenna - 780mm Black |
| | ANCA1103AU-04 | CEL-FI ROAM R41 Vehicle Booster Pack - 780mm Black |
| ANCA1101AU 780mm Matte Black | ANCA1104AU-02 | Cellular (4G/5G) Smart Antenna - 780mm Matte Black |
| | ANCA1104AU-04 | CEL-FI ROAM R41 Vehicle Booster Pack - 780mm Matte Black |



Q For more info visit zetifi.com/smartantennas or call us on 1300 093 711

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